

STROMBERG
Serial No. 09/722,420
July 9, 2003

IN THE CLAIMS

The following claim set replaces all prior versions, and listings, of claims in the application:

1. (Original) A method of treating a slurry of comminuted cellulosic fibrous material to produce a bleached chemical pulp, comprising:
 - (a) treating the material in a first stage with a gas containing ozone;
 - (b) treating the material in a second stage with a liquid containing chlorine dioxide;
 - (c) between (a) and (b) treating the material with an alkaline liquid to raise the pH of the material prior to (b) and so that no washing is performed between (a) and (b).
2. (Original) A method as in claim 1 wherein (c) is practiced to raise the pH of the material to at least about 6.0.
3. (Original) A method as in claim 1 further comprising (d), prior to (a), treating the material in an alkaline chemical pulping process, to produce chemical pulp.
4. (Original) A method as in claim 3 wherein (d) is practiced using an essentially sulfur-free pulping process.
5. (Original) A method as in claim 4 wherein (d) is practiced using an alkaline chemical pulping process that includes treatment with a strength or yield enhancing additive.
6. (Original) A method as in claim 5, wherein (d) is further practiced using an alkaline chemical pulping process includes a bulk delignification stage, and at least one

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stage prior to or during bulk delignification stage in which a liquid containing a first level of dissolved organic material is removed from the material and replaced with a second liquid having an at least about 50% lower level of dissolved organic material.

7. (Original) A method as in claim 1 wherein (a) is preceded by (a1) treating the material with a liquid containing chlorine dioxide, followed by (a2) treating the material with an alkaline liquid.

8. (Original) A method as in claim 7 wherein (a2) includes a treatment with oxygen, a peroxide, or both.

9. (Original) A method as recited in claim 4 wherein (d) is practiced using a soda pulping process.

10. (Original) A method as recited in claim 4 wherein (d) is practiced using a soda/AQ pulping process.

11. (Original) A method as recited in claim 10 wherein (c) is practiced to raise the pH of the material to at least about 7.0

12. (Previously Amended) A method as recited in claim 2 further comprising (d), prior to step (a) treating the material in an alkaline chemical pulping process that includes at least one selected from the group consisting of anthraquinones and polysulfides.

13. (Original) A method as in claim 2 wherein (a) is preceded by (a1) treating the material with a liquid containing chlorine dioxide, followed by (a2) treating the material with an alkaline liquid.

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14. (Original) A method as in claim 13 further comprising (d), prior to (a), treating the material in an alkaline chemical pulping process, to produce chemical pulp.

15. (Original) A method as recited in claim 14 wherein (d) is practiced using a soda/AQ pulping process.

16. (Original) A method as in claim 15, wherein (d) is further practiced using an alkaline chemical pulping process includes a bulk delignification stage, and at least one stage prior to or during bulk delignification stage in which a liquid containing a first level of dissolved organic material is removed from the material and replaced with a second liquid having an at least 50% lower level of dissolved organic material.

17 – 22 (Canceled)

23. (Original) A method of ECF treatment of comminuted cellulosic fibrous material comprising the sequence soda/AQ cooking, and then one of D-E_p-(ZEND), or D-E_o-(ZEND), or D-E_{op}-(ZEND).

24. (Original) A method as in claim 23 wherein the treatment is practiced to produce pulp with a brightness over 89% ISO.

25. (Canceled)